

ABSTRACT OF THE DISCLOSURE

A look up table LUT with specific gray reproduction characteristics is used for converting RGB image data to multi-tone data of ink colors. The gray reproduction characteristics of LUT are set such that the color
5 difference ΔE of a gray color area with an arbitrary tone level in the $L^*a^*b^*$ color system is kept at about 4 or less, assuming that the results are observed under two different light sources, such as standard light D50 and standard light A, respectively.